

FIG. 2

FIG. 3

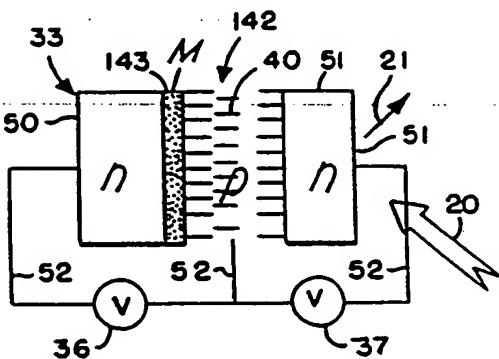
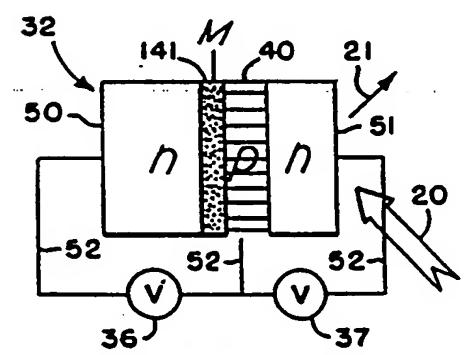
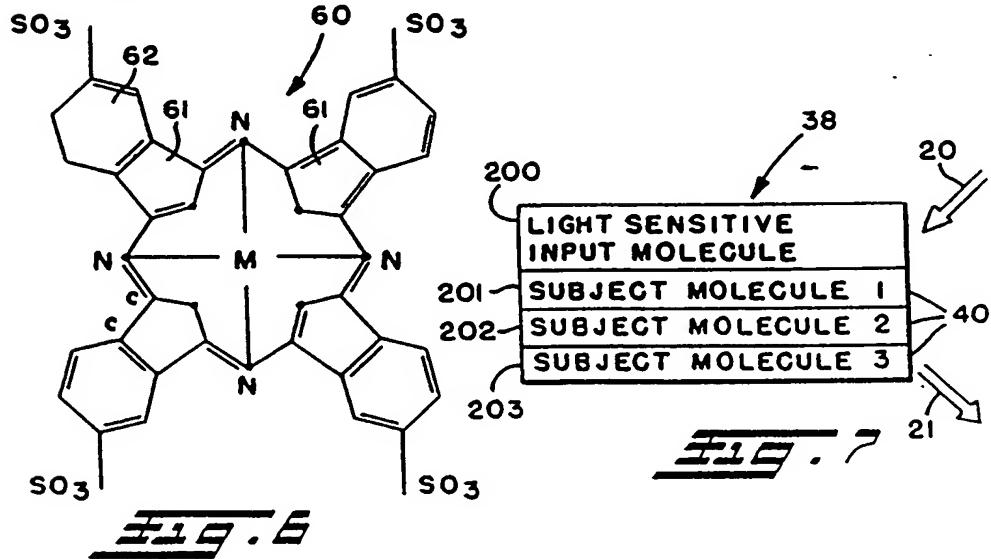


FIG. 4

FIG. 5



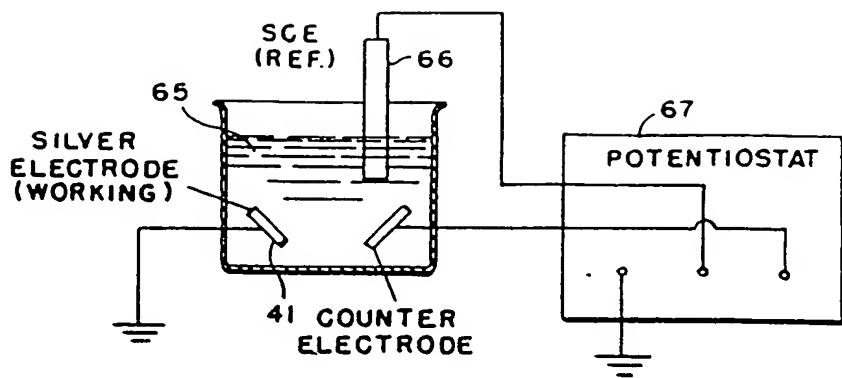


Fig. 8

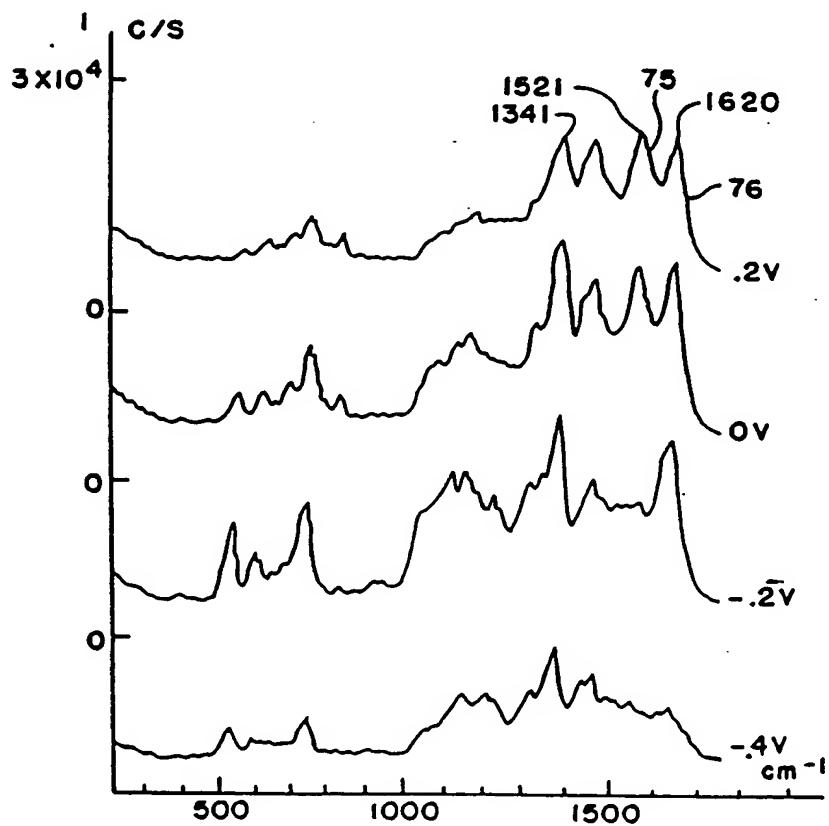


Fig. 9

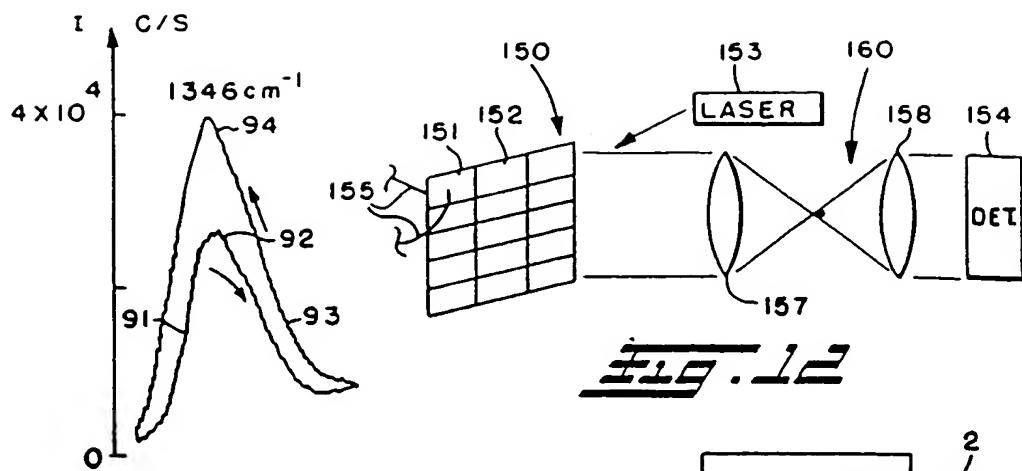
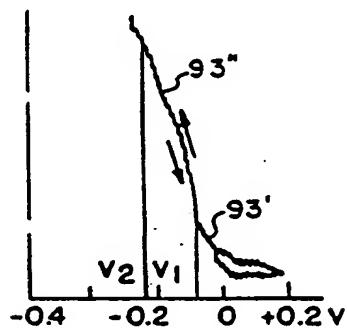


Fig. 10a



## Fig. 10b

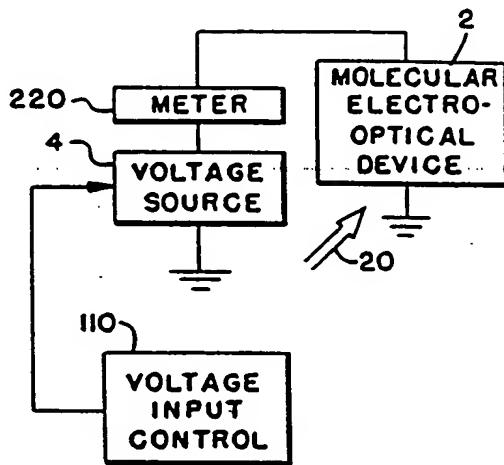


Fig. 13

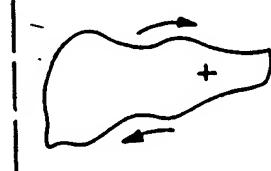


Fig. 10c

10014659 • 121101

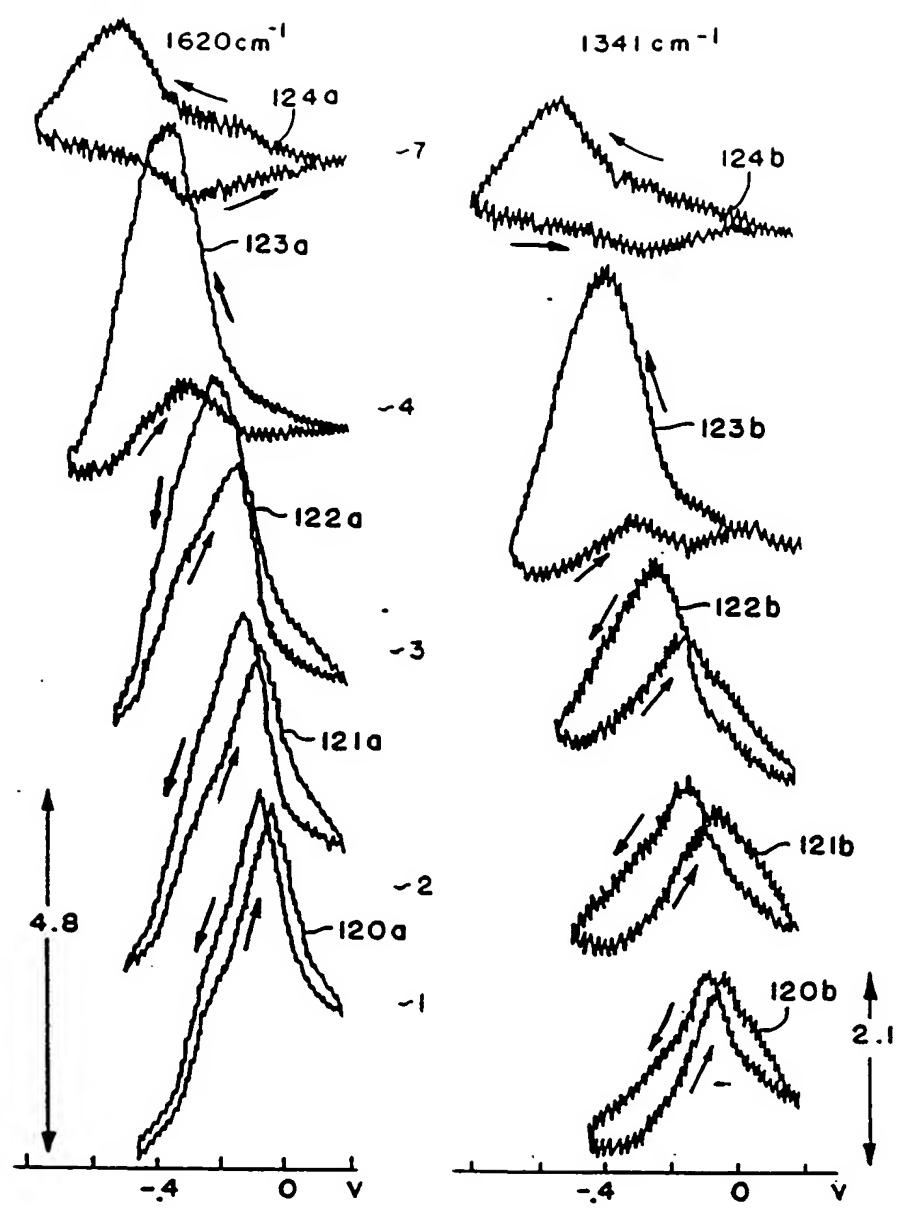


Fig. 11a

Fig. 11b

1000146562422100

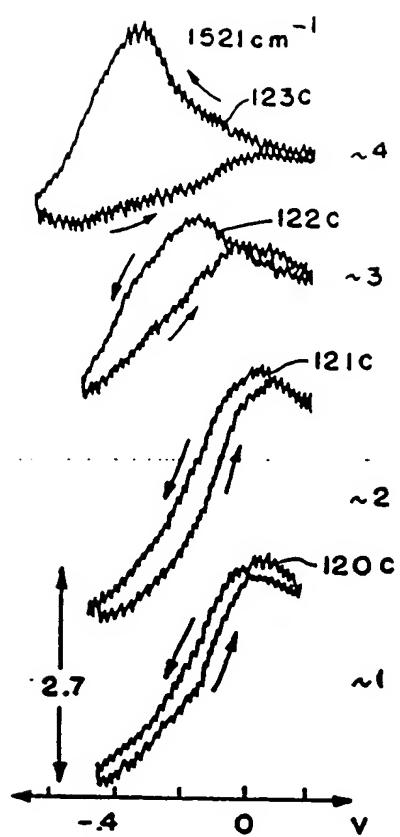


Fig. IIc

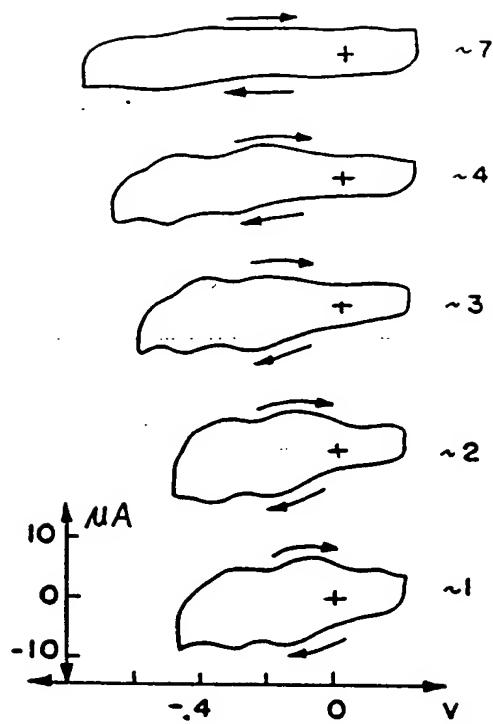


Fig. II d

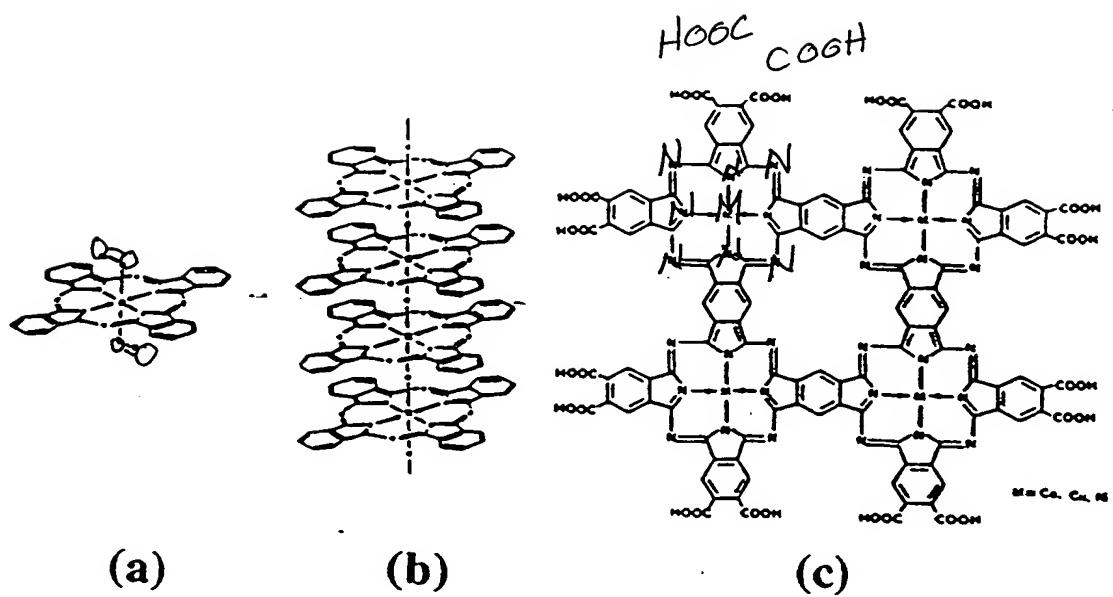


FIG. 14

*Schematic representation of different phthalocyanine structures. (a) Monomer, (b) ring stacked and (c) polymer sheet.*

1000 1465 59 122 100

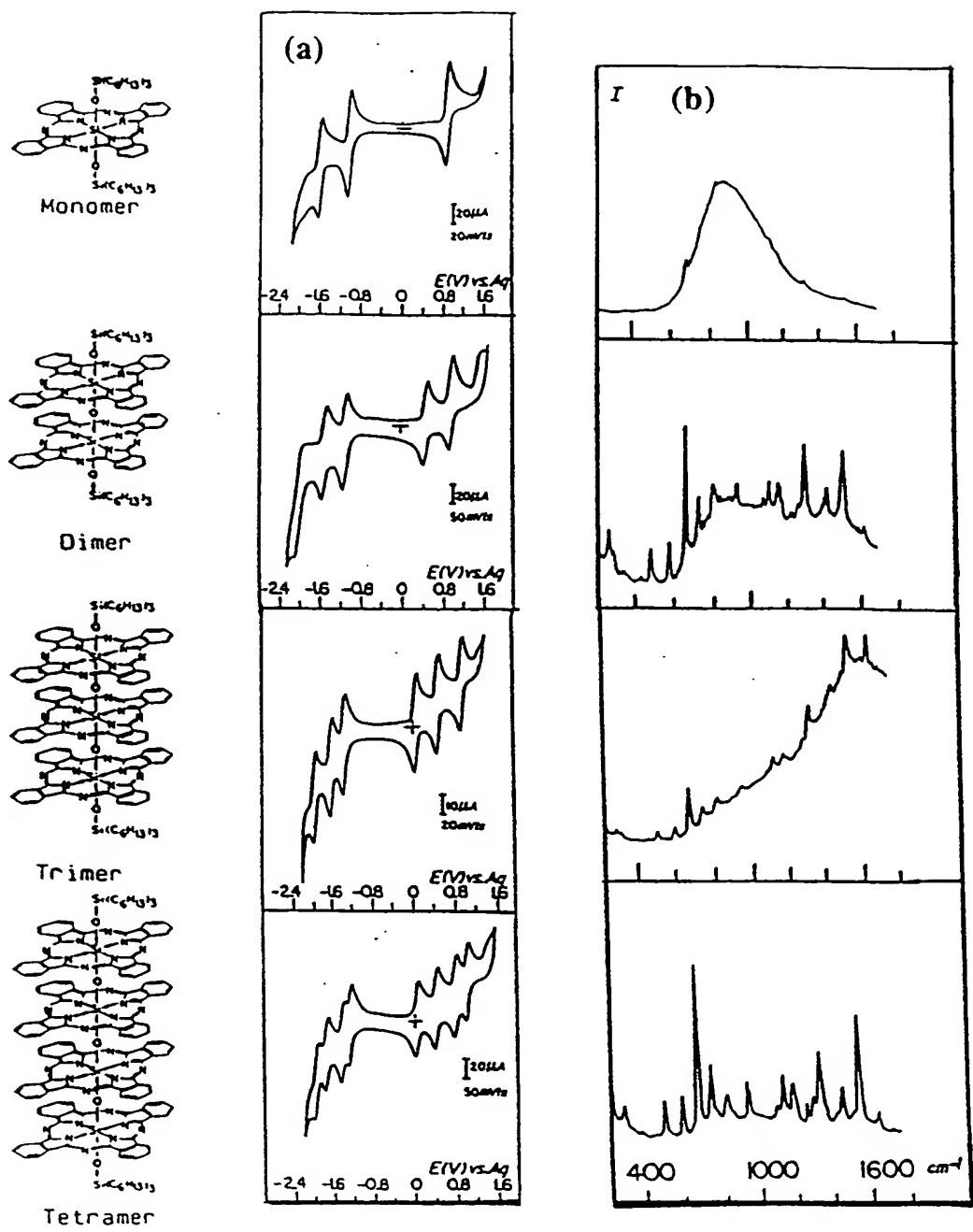


FIG. 15

*Electro-optical properties of oxygen bridged  $(O\text{-Si-Pc})_n$  for  $n=1, 2, 3$  and  $4$ . (Middle) Cyclic voltammograms obtained from  $10^{-3} M$   $(O\text{-Si-Pc})_n$  in  $0.1 M$  tetra-*n*-butylammonium perchlorate in  $CH_2Cl_2$  adsorbed on a platinum electrode and (Right) depolarized resonant surface-enhanced Raman spectra obtained from  $(O\text{-Si-Pc})_n$  adsorbed on a silver electrode at  $0 V$  versus SCE. Laser excitation at  $632.8 nm$  and  $20 mW$  output power. The electrolyte is  $0.05 M$   $Na_2SO_4$  saturated with argon gas.*

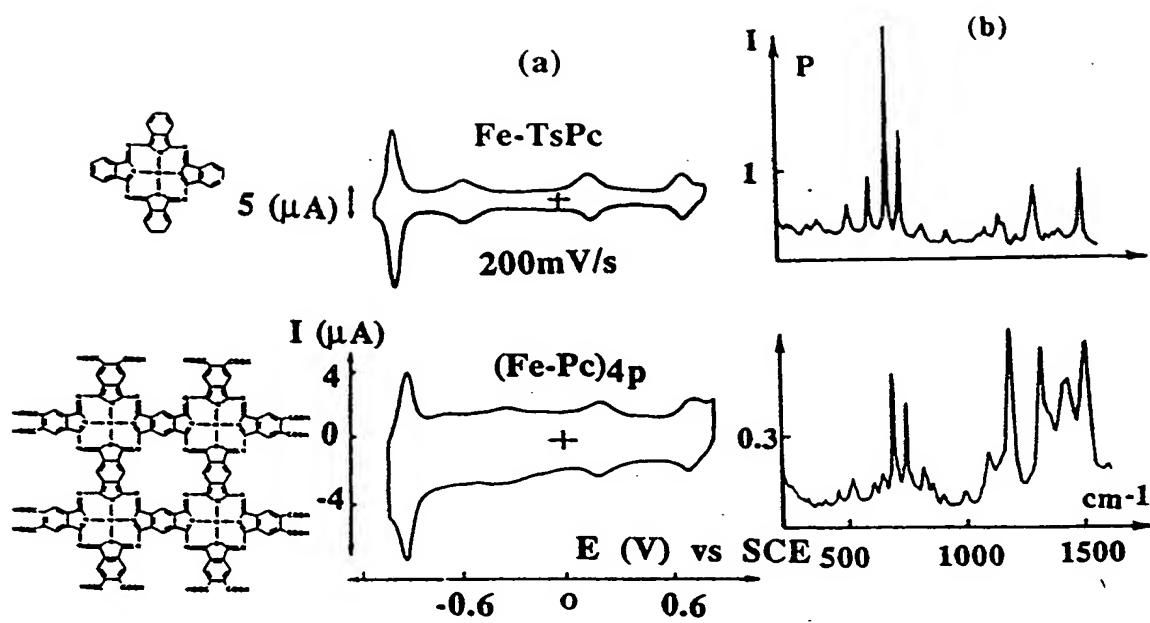


FIG. 16

*Electro-optical properties of Fe-TsPc monomer and polymeric sheet  $(\text{Fe-Pc})_4\text{p}$ : (a) Cyclic voltammograms; (b) surface-enhanced resonant Raman spectra. Laser excitation at  $632.8\text{ nm}$  with  $20\text{ mW}$  output power.*

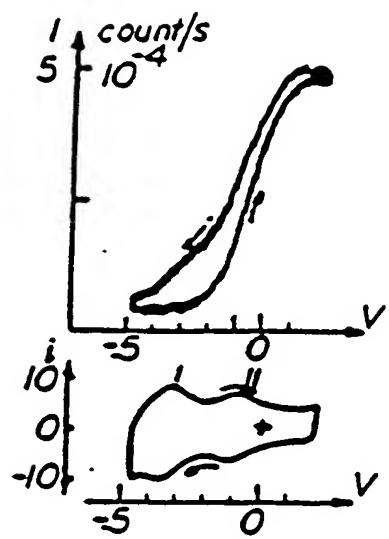


FIG. 17

*A curve representing the pulse code firing rate of a neuron obtained from Fe-TsPc adsorbed on a silver electrode.*

